Unit - 1

(1.1) Concept of learning, types of learning and factors of learning

Concept of learning

- Learning is an important phase of human-life. It is a basic factor in education.
- Permanent change of behaviour due to experience.
- Aquisition of knowledge, skill, habit, attitude.
- ~~changes according to time~~
- Modification of behaviour.

Defination

Skinner :- Learning is both acquisition & retaintion.

Crow and Crow :- Learning involves the acquisition of knowledge, habit & attitude.

Characteristics of learning

1. Learning is continuous / Lifelong.
   - It starts from womb to tomb.
2. Learning is gradual / orderly
3. Learning is universal. Both animals & mans are learns.
4. Learning is purposeful & goal directed.
5. Learning is active
6. Learning is comprehensive (All round, Overall, Holistic) — Cognitive, Affective, Psychomotor.

(7) Learning is need based.

(8) Learning is adjustment to a new situation

(9) Learning affect the conduct / behaviour of learners.

(10) Learning is growth

(11) Learning is transferable

(12) Learning is motivated, intelligent and creative.

(13) Learning is a creative experience.

(14) Learning is a process

(15) Learning is multiple line, verbal, skill, Motor, conceptual, perceptual

(16) Learning may be right or wrong, desirable or not desirable.

(8) what is Learning write down characteristic of Learning.

Types of learning

Learning takes place on the cognitive, affective and conative planes.

acquisition of knowledge - cognative
Modification of emotion - affective
acquisition of Skills - conative

Learning can be different types :-

> Learning of motor skills, verbal learning, affective Learning, cognitive learning.

> Gagne has classified learning into 8 types in hierarchical order.

(1) Signal learning :-

> commonly termed as classical ~~conditioning~~ conditioning given by pavlov a Russian psychologist.

> In classical conditioning,

(U S) - food
(C S) - sound of bell are paired together and presented to the dog a no. of times.

> This modification of behaviour of causing salvation to the sound of bell is called conditioning or signal Learning

② S-R - Learning :-

(Stimuli - Response)

→ This is also k/as operant conditioning.

→ Developed by Throndike & B.F Skinner through puzzel box experiment.

→ It is a method of learning that employees reward & punishments for behaviour.

③ chain learning :-

There are two types of chain learning.

1. Motor & verbal

ex- walking Language

running Learning.

chaining means connection of a set of individual / action.

connection two or more previously learned stimulus - response bond into linked order.

e.g - Turning on TV set.

riding bicycle.

④ verbal associated learning :-

Memorization & retention of lists of words. e.g - Picture, locations, odours. etc.

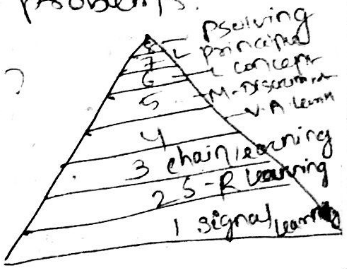
e.g - A child is ~~commonly~~ shown an object as doll. The next time If he sees the particular object he will be able to say that it is a doll.

⑤ Multiple discrimination :-

It is a ~~behaviour~~ discrimination higher mental process and solve problems.

Discrimination. — what ?

How where? who? why?



⑥ Learning of concept :-

→ The ability to put objects in to a group, catagorizing or assimilating.

→ we form concept by fending properties.

⑦ Learning of principles :-

→ principles have relationship among two or more concept.

→ The ability to apply natural laws or relationship between objects.

→ Classroom learning contributes to the development of principles.

problem solving :- comes at highest stage of learning process.

→ Depends on learning of rules, application rules & abstract reasoning.

Factors of learning

- Classroom learning is influenced by a no. of factors.
- Three broad factors influencing learning are:

(a) physiological factor:-

(i) The organism & perception
(ii) organic defects
(iii) fatigue, mental Health
(iv) Time of day & learning
(v) Environmental conditions
(vi) Drugs - alcohol, caffeine, tobacco
(vii) sex difference in fatigue
(viii) Age
(ix) Motivation, fear of failure
(x) intelligence.

(b) Pedagogic factor → use of method in learning.

(c) ~~Motivation factor~~ → teachers attitude toward children

e.g - Field trip, action learning, ~~time~~ team-exercise, project work

(d)

(e) Environmental factors → Natural surrounding.
eg - climate & atmosphere
- Social surrounding e.g - improper light, noisy place
- family background

(d) Motivation factor → Heart of learning process.
- It generates the will in an individual to do something, will power, readiness

(E) personal factors:- interest, Attitude, Skill & Knowledge, ~~physical & mental health~~, goal of life, ~~Readiness & will power~~.

(F) Maturational factors:- determines the readiness of the child for learning.
- ability to accept
- physical & mental development

(G) Physiological / Biological factor
Maturity, proper sleep, Tiredness, physical health, proper nutrition, Needs.

(H) Teacher related factor:-
- Art & skill teaching
- Mastery over the subject matter.

1.2 Learning process : Attention, sensation, perception & concept formation

(A) Attention :-

- In teaching - learning process, attention is the major source of learning.
- concentration of mind.
- clear aim at one point / object
- being focus.

Attention as the selective act of consciousness. It is the selective activity of the mind. - Rex & knight

elements of attention → focus, concentration, Selection, clearness

characteristics of attention

- Attention is selective
- It can shifted from one object to another
- Attention is knowing, feeling & doing
- Attention is aroused by new stimuli
- Attention has narrow range.

Types of attention

① voluntary attention :-

- volitional or knowingly.
- It is of two type (A) voluntary effortfull attention
- We may not be interested in solving a difficult problem, still we want to do it.

(B) voluntary effort less :-

- A certain task may be difficult in the begining but it becomes easy after repeated trials. It occurs due to a change in nature, habit & sentiment.
- Practice makes a man perfect.

Nonvoluntary attention :-

Non volitional / unknowingly

(A) spontaneous attention → Natural interest

Mother's attention spontaneously goes towards her child the moment when she hears him weeping.

(B) Forced attention → forced stimuli of some unpleasant sound is heared while you engaged in your work your attention automatically goes towards it.

By this way, as a teacher, you can attain the learner.

⊛ How to secure attaintion in children

① Method of teaching interest
② TLM, Teacher's attitude is very imp.
③ Audiovisual (TV, projector)
④ practical work, project based work
⑤ Learning by doing
⑥ reward & punishment
⑦ Q/Answer method.

(B) Sensation :

- By using eye, nose, ear, Tongue, skin we get information is known as sensation
- Response to external stimuli e.g.~ touch, pain, temp
- knowledge gain is the 1st step of sensation.
- Sensation is the gateway of knowledge
- It is a elementary process.
- eye - see, nose - smell, ear - listen, Tongue - taste, Skin - feel/touch

four major characteristics

Quality - Quality of sound is different

ex- distinguish red from blue, sweet from bitter, hot from cold.

- Red & blue belong to the same kind of sensation both are sensation of sight but they are differ in quality.

Intensity - loud noise / faint noise

ex- strong smell may be differ from weak one.

Duration - Duration of taste of sweet and bitter / chilli.

Extensity - volume or spread

- put one finger / full hand in water.
- Laser light to eye or Hallogine to eye.
- Pull a few hair / hand full hair.
- look a thing from distance / near.

Types of sensation

eye - visual
ear - Auditory
Nose - olfactory
Tongue - Gustatory
Skin - tactual.

Perception

Sense organ —Reacts on→ External world

← Stimulation caused

Carried to the general brain

↓

Messages or stimulation converted into sensation.

fig:- Stimulation / messages converted into sensation

(C) Perception

- perception is the concious understanding of some thing.
- perception belongs to the knowing experiences.
- perception = sensation + meaning

perception is the process of getting to know objects and objective facts by the use of senses.
- Woodworth

- It is a complex mental process.
- perception is more of a psychological process.

(B) Development of perception

It is of 3 stages

Stage-1 - pure sensation ওড়িআ।

Stage-2. Assimilation আত্মীকরণ।

Stage-3 — symbolic perception (প্রতীক। word/Image)

- pure perception consist of entirely of outside sensations.
- Assimilative perception is composed partly inside & partly outside sensations
- symbolic perception is entirely made up of inside sensations

(D) Concept formation

- Sensation + perception = concept formation
- sum total of what you know about the object.
  ex- a black cow.

Nature of concept

- Not static, always changable, modified with time.
- concept is common for all
- concept is part of identifying, naming

thought process

eg - concept of object :- cat, chair, pen

concept of person :- friend, mother, Indian

concept of event :- picnic, festival, party.

Types of concept formation

Direct experience

- see Real thing
- 1st hand
- primary source
  ex- concept about cow

Indirect experience

- pictures, photos, reading discription, hearing
- 2nd hand
- secondary source
  ex - concept about kangaroo

Faulty concept :- error, wrong concept.

- one's anxity over the crossing of his way by a cat.

Process of concept formation

1. perception - experience
2. Abstraction - observe
3. Generalization - Generalize.

(B) 1.3 Memory and forgetting:
concept, types of memory, applicability to learning & strategies for better management of memory

Concept of memory

→ Encoding the information, store it and retrieve it at the right place & right time (ഓർമ്മ)
called as memory.
→ revival of something.
Memory consists in remembering what previously been learnt. He regards memory as involving learning, retaining, recall & recognition.

Woodworth's

→ Memory is the conservation of past experiences to be utilized later as and when the occasion arises.

Stages in memory

1. Registration/Learning → Attention or 1st step in memory.
whenever something is learn it leaves behind a record or impression in our mind in form of memory trace.
2. Retention → (storage) A resting state of impression recieved by the mind
3. Recall (ഓർമ്മിക്കൽ) → To remember something
① spontaneous recall ② Deliberate recall
4. Recognition - Ability to recognize correct thing/information

Types of memory:

Diff. types of memory
Short term memory
Long term memory
Habit memory
Remote memory
Rote memory
Episodic memory
Sensory memory

① Sensory memory - It is a gate way.
→ Related with sense organ.
→ No storage capacity.
→ Helps in information entry.
1 Auditory memory 4 Olfactory memory
2 Visual memory 5 Gustatory memory
3 Tactual memory

Short term memory (STM)
→ It is also called working memory
→ situated prefrontal cortex of brain
→ store information or remember within minutes to days.
→ After age 40, loses its efficiency.
e.g. → what you read yesterday.
→ what you had yesterday.

③ Long term memory :- (LTM)
- semantic memory ⟶ procedural / Declarative
- This type of memory last a long time for year.
- It store all information.

e.g- Marriage, birthday, some memorable day.

④ Habit memory
- implicit memory → function of the body
- Muscle memory
- This memory store in cerebellum.

e.g- once you learnt how to ride a bicycle, can you will not forget.

⑤ Remote memory :- Life time accumulation of data about a wide variety of topics
ex- life experiences

⑥ Rote memory → remember without understanding.

⑦ Episodic memory :- Related with specific personal experiences. Life's imp. events
e.g- Love at 1st sight, outing, picnic, friend's special b'day party.

Improvement / Development of memory

① Favourable conditions which improve memory or remembering :-
- Motivation, interest, Revise, practice
- Free from illness, tension & worries.
- Healthy condition & good atmosphere
- whole-hearted concentration.

② Improved method of which enhance memory
- Learning by doing
- use of Mnemonics e.g- poem, word, short cut form.
- spaced learning.
- whole / part method
- chunking
- maintainance / Elaborate rehearsal
- TLM / Activity using teach

Forgetting → 1st studied by Ebbinghaus.
- Fail to recall
- Mark of poor memory
- negative phase of memory.
- can't retrive in mean time.

Cause of forgetting
① Fading (ক্ষীণ) memory traces
② Lack of interest.
③ Lapse of time → 24 - 69% forgot
7 day - 79% "
④ Emotional disturbance & Repression
⑤ Lack of Need
⑦ Time gap
⑧ Fear / exam anxity
⑨ Retroactive inhibition → past learning disturb present learning.
⑩ proactive inhibition → present learning disturb past learning.

Suggestion .
→ Revision / practice , chunking mnemonics
→ motivation
→ time gap
→ child have no fear

1.4 Transfer of learning: concept, theories & types (Horizontal & vertical)

Transfer of learning :-
→ If the knowledge of situation / law is applied to another situation is called as transfer of learning
→ It is an important concept of life.

→ The experience gained in one field helps in learning things in other field.

→ Transfer of learning occurs when
a) There is common features among concept skill or principles.
b) Links the information in memory.
c) Sees the value of utilizing what was learned in one situation in another.

e.g - Skills in playing violin facilitates learning to play piano.

e.g - Luna bike ⟶ Scooty Bike
context situation —transfer→ another situation

According to best & easy :-
"Transfer of Training is the partial or total application or carry over of knowledge , skill , habits , attitudes from one situation to another situation".

Types of Transfer of learning :-
There are four forms of transfer of learning
1) positive Transfer
2) Negative Transfer
3) Zero Transfer
4) Bilateral Transfer

Positive Transfer :-
→ Learning in one situation helps in learning in another situation (or) past learning helps in present teaching.
e.g - knowledge of mathematics helps in physics.
- Drive of scooter to car.

Two type → Horizontal (Lateral) ; vertical (from present ? / from level of present task is high)

proactive inhibition - when new problem for old.
Negative Transfer :-
Retro active inhibition - old problem for new
→ when learning of one task makes the learning another task harder.
(or) Past learning create problem in present task
e.g- Telugu ⟶ learning malayalam
plural form of house ⟶ houses
Mouse ⟶ Mouses ✗ mice

③ Zero transfer (Neutral):-

When learning of one activity neither helps or hinders the another learning area. e.g - knowledge of music → learning of Science
→ learning of driving car.

④ Bilateral Transfer

It is the transference of physical performance learned by one side of the body to the opposite side of the body.

Right hand ⟶ Left hand

According to Gagne

(i) Lateral transfer - prior & lateral both same level of difficulty

(ii) vertical transfer → problem solving
→ +, -

Educational implication of transfer of learning

→ ~~Always try to connect with real life example.~~
→ In school, transfer can help students learn.
→ If students can use ~~prior~~ previous knowledge, it will help them understand the content of new lesson.
→ ~~prior~~ previous knowledge helps students understand the problems that a particular body of knowledge is intended to solve.
→ Simple concept ⟶ Complex concept

Ⓐ Theories of transfer of learning

① Theory of identical elements (Thorndike)
② Theory of generalisation of experiences (Judd)
③ Theory of ideals of procedure
④ configuration or Transposition theory (Gestalt)

Ⓑ effective condition for transfer of learning :- ex- science exhibition, math race, game

① Method of teaching
② varied curriculum method
③ Large no of examples (or multiple)
④ understand & develop generalization
⑤ subject with transfer value
⑥ intelligence & transfer
⑦ search for transfer
⑧ Attitude of transferability.
⑨ practical
⑩ Activity method
⑪ TLM
⑫ field trip

—x—

① write down transfer of learning & its type?

② what is effective condition for transfer of learning?

③ what is motivation. write down its types?

④ what are the processes to motivate the students?

1.5 Role of motivation in learning, methods of improving motivation

Motivation - Motivation is derived from Latin word ~~Mot~~ Movere = means to move

- It is a process which arouses energy or drive in the individual to proceed in an activity.
- It is important for learning process
- It is both activator or director of behaviour
- Motivation is a tendency to seek a particular goal.
- Animal behaviour is motivated by biological drives ~~seh~~ such as hunger, sex etc.
- Human behaviour is motivated by biological as well as psychological & social motives.

Characteristics / function of motivation or Role of teacher

1. Motivates originate & energize behaviour
2. Motivates sustain behaviour
3. Motivates direct behaviour.
4. Motivated behaviour is selective behaviour

Types of motivation

1. External / Secondary / Artificial motivation

- when cause of doing something is due to another cause.

ex - going school / without interest
- we study effortfully only for exam.

2. Internal / primary / Natural motivation

- when we do something in our own interest.

e.g. - emotional need, physiological need, social needs etc.

Methods of improving motivation

1. childcentered teaching
2. correlated teaching
3. Novelty.
4. Learning by doing
5. providing incentives
6. Clearcut assignment
7. Story telling.
8. Field trip.
9. playing game
10. Teaching aid like slides, film strips, films
11. Provide stimulating envt. like, zoo, science fare, farm, park.

ॐ श्री

unit-2

2.1 Trial and error Theory

(connectionist theory) → Throndike

E.L Throndike – An American psychologist
↓
→ Father of educational psychology → Trial and error theory
→ behaviorist
→ experiment – Hungry cat

→ Learning in a matter of bond connection.

→ Stimulus → Response bond theory

ex – your hungry → you eat food

cold → sweater

ex – a cyclist learns cycling after a good amount of trial and error for maintaining balance

→ Bond connection are formed through trial and error.

→ so we learn by making trials, making errors we try again & again until we successed.

Thorndike's puzzle box experiment

- Throndike studied the character of Trial & error Learning in a no. of experiments on hungry cat.

- In this experiment, a hungry cat was placed in the box & door was closed. A fish was placed outside the door.

- So the cat tried so many times to get the food by change the door opened cat jumped immediately to the food.

- By trial method cat was able to open it.

The basic principles

1. Bond connection → (S = R)
2. Stimulus as motive → need or desire to attain the goal.

Laws of learning given by throndike

~~Primary Law~~ :-

1. Laws of exercise → learning takes place by doing, exercising, actively participating.
   - practiling.

(a) Law of use - "practice makes perfect"

(b) Law of Disuse - Lack of practice
↓
Lack of perfect
↓
~~Lack of~~
we will forget the learning / skill.

2. Law of effect // (Law of pleasure / pain)
   - It can be positive effect / Negative effect
   - e.g - If you study, then get a good grade on test, you will more likely to study for next exam

3. Law of readiness :-
   - Learner must be ready to learn.
   - How much a child can achieve or learn it depends upon his readiness.

Educational implications :-

1. effect of motivation
2. Exercise patience - It is gradual
3. place of exercise - Revision
4. make learning meaningful
5. we must learn basic things needed for it in any learning.

6. This theory has drawn our attention to the principle of learning by doing
you will learn only when you do a thing.

Secondary law

- Law of recency - Revise or recent learning
- Law of primary - first impression last long.
  ex. children should given right education from day 1 / foundation clear.
- Law of intensity of stimulus →
  more stimulus attractive → more Response
- Law of belongingness: (সম্পর্কিত)
  Teacher should give some familiar example to the students for their better understanding
- Law of sets & attitude
  mindset
  e.g. - If you are passionate enough towards teaching profession any how you will

Law of multiple response

multiple trial on respond.

- Law of partial activity:
  do or respond a stimuli which is more important.
- Law of (analogy) (assimilation) :-
  past knowledge help to present.

2.2 Classical conditioning - Pavlov, concept, & principles & classroom implication

→ principle of classical conditioning formulated by - Russian physiologist I. Pavlov in 1909

→ Pavlovian / Respondent conditioning.

→ It is a learning that occurs through associations between an envt al stimulus & a naturally occurring stimulus.

experiment :- with a hungry dog

→ A dog was kept hungry for a few days
→ It was tied to the experimental table
→ The bell was ringing before the dog got food.
→ After getting food the dog salivated.
→ It was measured upto some trials the dog did not get food, but the bell has been ringing.
→ The dog still salivating without food.
→ So dog was conditioned by conditioned stimulus i.e bell.

Major work

① Before conditioning ② During conditioning

Food ⟶ salivation Bell → No salivation

(unconditional stimulus (UCS)) UCR (CS)

③ After conditioning

Bell (CS) → Salivation (Condition Response)

principles of classical conditioning

① Reinforcement → Making something stronger.

bell + Food —to release→ saliva

reinforced

bell reinforced to release saliva

② Extinction :- decrease / disappearing when the food repeatedly did not follow the bell dog stopped salivation. This disappearance of stimulus response connection is called extinction.

③ Spontaneous recovery :- After extinction, CR still randomly appears after the CS is presented in a less intensity.

④ Stimulus generalization :- conditioned dog to salivate using the sound of bell & food.

⑤ Stimulus Discrimination :-

ex- Responding to a green light but not a yellow light.

Individual reacts differently to different situation based on past experience is called stimulus Discrimination.

6. Higher order conditioning :-

After pairing bell sound with food that elicits salivation.

CS → CR

Bell + food → Salivation.

Educational implication :-

→ These principles are used in psychotherapy

→ Animal trainers use classical conditioning principles

→ It helps to avoid many of our unwanted fear.

→ It helps to control abnormal behaviour, like different phobia.

→ Good habits can be developed in children on the basis of reward & punishment conditioning.

2.3 operant conditioning – Skinner, concept, principles & classroom implication.

operant conditioning

- It is given by B.F. Skinner.
- Operant conditioning sometimes referred as instrumental conditioning.
- It is a method of learning that employs reward & punishment for behaviour.
- In this an association is made between a behaviour & a consequence for that behaviour.
- Skinner developed a simple apparatus k/as skinner box to study operant conditioning.
- Skinner conducted this experiment with a rat in a skinner box.

characteristics of operant conditioning

① Reinforcement :- A phenomenon in which a (↑ reward) stimulus increases the chances of repetition of previous ~~knowledge~~ behaviour.

e.g – Food, toys, salary, chocolate etc are act as reinforcement

- Two type – ① positive reinforcement
  ② negative reinforcement

punishment (↓) ⟶ stimulus that decreases the probability that a preceding previous behaviour will be repeated

e.g – you are punished for a work, so next time you will not repeat

- Two type ① positive punishment
  ② Negative punishment

Educational Implications

- classroom management
- shaping behaviour of child.
- teaching of skills
- Animal training, therapies
- Habit formation
- programmed learning

2.4

classical	operant
I pavlov	B.F Skinner
Also called Respondent conditioning.	Also called ~~Response~~ Instrumental conditioning
stimulus plays dominant role	Response plays dominant role.
It is S – R cond^n	R-S conditioning
involuntary behavior outcome	voluntary behaviour outcome
experiment by dog	experiment by rat

unit - 3 | cognitive & humanist ~~ron~~ perspectives of learning

3.1 | cognitive perspectives of learning

① ① Insight learning - ~~kto~~ Kohler
(understanding)

- wolf gang. Kohler founded insightful learning theory in 1920s
- wolf gang kohler is a German psychologist
- This theory belongs to Gestalt School of psychology. (wertheimer, koffka, kohler)
  ↓
  whole of anything is greater than its parts
- whole to part approach.
- kohler proposed that insightful learning is not based on Trial & error or conditioning rather is based on sudden grasping or understanding of meaningful relations.
- we can say sudden solution to problem
  ex - Idea
  Dimag ka bati Jalna

- Kohler said learning is not a habit of S-R connections.
- Rather it is gestalt | totality | ~~orig~~ organized whole.

They Theory proves → whole is more imp. than the parts.

- This learning is also involves the "I have found it" feeling or eureka
- This is also expressed as Aha moment

- Learning takes place as a whole
- we try to grasp the whole situation & then act accordingly to find out the best soln.

- Insightful learning theory implies sudden grasping of the solution.

objective :- ① Experience
② Intelligence
③ Learning situation
④ Efforts

- experiment on chimpanzee, sultan
  ex - Eureka! I found it.

② Theory of instruction / Discovery Learning
②

student give situation · the find out result

(→ Bruener)

Jerome. S. Bruener - American psychologist

→ It is a technique of inquiry based learning. a constructivist based approach to education.

→ Student is not provided with an exact answer but rather materials in order to find the answer themselves

Discovering -

- developed cognitive model of learning

→ His theory explains how the matter to be taught can best be learned.

→ Student participate in hands-on and problem-solving activities

→ Bruener believes that students must be active.

→ They must identify key principles for themselves rather than simply accepting teacher's explain.

→ Teacher can help and give guidance but cannot do for them

→ cognitive process - in teaching & learning

Learning modes

→ enactive → learn through action / movement

→ Iconic → " " images / Icons

→ Symbolic → " " Symbols

Bruener gives emphasis on 3 points -

a. nature of person as knower

b. structure of knowledge

c. nature of the knowledge acquisition process

Bruener's rationale behind his theory of instruction: -

1. Learning is cognitive process
   - Aquisition
   - Transformation of knowledge
   - Evaluation

2. Learning involves curiosity about person, event & things.

3. Learning is forming concept.

4. Cognition is a continuous process

5. Children should be made to discover thing their own. They should not be put on spoon feeding or blind repetition.

6. Teacher give instruction to achieve the goal of knowledge

7. focus on process

8. failure encourages students to continue to search for solution.

③ Developmental theory of learning – piaget
or
cognitive approach to learning

According to piaget cognitive development means how knowledge is acquired & developed through successive stages.

1. Sensor motor (Broth to 2 yrs)
2. pre – operational (2 to 7 yrs)
3. concrete – operational (7 to 12 yrs)
4. Formal – operational (From 12 yrs onwards)

cognitive intellectual activity :-

cognitive ~~derived from~~ latin word "cognoscere" means to know, to percieve.
or

cognitive theory :- The ability of the brain's mental process to absorb & retain information through experience, senses & thought.

cognitive psychology :- To study one's internal processes. These are things going on in one's brain such as thinking, attention, learning, problem solving perception etc.

cognitive theory :- It discuss about how people gain in an understanding themselves & their environment & how is using this act in relation to their envt.

According to this approach, learning is a complex process & it is viewed as acquiring changes in the cognitive structure ie learning is change in the cognitive structure. These changes takes place in 3 ways.

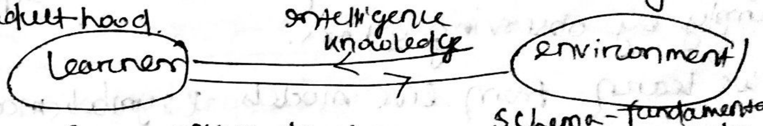
1. Differentiation – process of lout of differentials
2. Generalization – after differenting the concept the child graduany catagorizes on the basis of specific characteristics.
3. ~~Restructesation~~ Restrucrisation – The process of differentiation & generalization leads to restructurisation

Main characteristics of cognitive approach

Learning is human mental process.
" is active & dynamic process.
" " learner perceive through differentiation, generalization, restructurisation.
" " perception is imp. in forming mental map.

cognitive approach to learning :-

→ piaget studied the growth & development of the child
→ He described the process of human thinking from infancy to adult hood.



process of cognitive development — Schema – Fundamental block of knowledge

1) Assimilation :- It is the broadening of an existing schema to include new information

2) Accomodation :- modification of a schema as new information is incorporated.

(4) ~~Social learning - Bandura~~

Equilibrium :- It is a concept developed by Piaget
- It means cognitive balancing of new information with old information

Adaption :- It is a two fold process
assimilation + accomodation.

(4) Social development theory - Albert Bandura

Social development theory - Albert Bandura 1925 (experiment - Bobo doll)

Albert Bandura - canadian psychologists
- Environmentalist
- president of American
- Psychological association

→ It is a process of social change in which people learn from each other in ways that can benifit wider social ecological system.

→ Bandura proposed a new technique of learning called observational learning or modelling

→ Most of learning takes place through imitation observation & model. (Teacher, parents, friends & surroundings)

→ Bandura said people learn much more rapidly simply by observing others.

→ We learn from live models & symbolic models.

→ observation teaches us the probable consequences of new behaviour. This process is called "vicarious reinforcement". (indirect)

e.g - your classteacher praises your friend for good handwriting or for some otherway then you too tries to write well.

→ Models can influence kinds of behaviour.

a) aggression
b) sex roles
c) pattern of self re inforcement
d) pro-social behaviour.

observational learning consist 4 components/stage

1. Attentional process (input) - Acquisition
- concentrating
- Attention is very imp for imitation
- psychological factors

2. Retentional process (store) - Retention
- Restoring/remembering

3. Motor reproduction process (output) :- Performance

4. Re-inforcement & motivational process. (+ve feed back / -ve avoid)
- consequences

Self re-inforcements (High / slow)
① Self efficacy → belief in his capacity (goal/belief)
② Vicarious learning → change your behaviour by seeing another. ex- another student punished you silent

Reciprocal determinism (cognitive factors | Behavioural factors | environmental factors)

Modelling - Attention
Re "
Reproduction
Motivation

⑤ Social constructivism – vygotsky :-

Lev vygotsky :- Russian psychologist

constructivist theory
or
constructivist learning & teaching
or
Learning occurs as learners are actively involved and actively participants to get knowledge

→ It is different from piaget.

→ It is a cognitive development theory.

→ Learning always builds upon knowledge that a student already knows this prior knowledge is called a schema.

characteristics of constructivism :

1. Knowledge is constructed
2. Learning is an active process
3. learning is a social activity
4. Motivation is key to learning.
5. The activities are interactive and student-centered

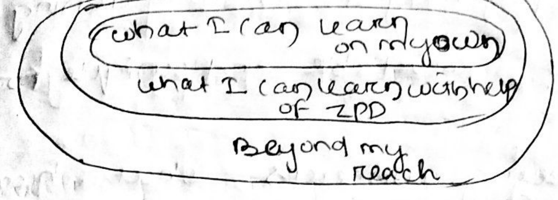
key process in development of learning

① Internalization – ~~To make knowledge from your society~~
① Zone of proximal development
② Scaffolding
③ language & dialogue
④ tools of the culture

concept Internalization :- To make knowledge from your society.

Zone of proximal development :-

The gap between child can do a task with help & don't do a task with help

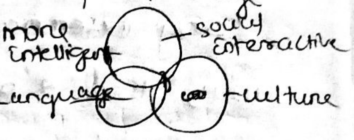


Scaffolding → It is given by MKO to learner

Guidance, Help, support, Temporary

depends on child's need, doesnot depend on age

MKO – More-knowledgable other / more intelligent



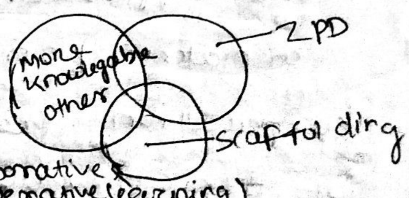
educational implication

① Social constructivist classroom

- a. Discovery
- b. project
- c. problem solving
- d. Activity

} Group → establish opportunities for children to learn with the teacher and more skilled peers.

2. Teachers are facilitator
3. Acess of ZPD of child



4. provide scaffolding

① Guide instruction by teacher
- a. grouping (collaborative & cooperative learning)
- b. Reciprocal teaching (T-S, S-T interaction)
- c. peer tutoring (friend clear your doubts)

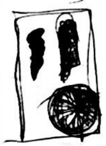
B.2 Humanist perspectives of learning

~~Learning~~ Learner centered approach - Rogers

The major assumption of humanistic approach

- Humanistic psychologists view learning as a process that inevitable and unique for every individual.
- Human beings concerns - what a human being ought to be
- A child is capable of learning without any external pressure so let him learn with love & peace.
- Human beings possess the power or potential of solving problems through reasoning, courage, vision & other human virtue
- ~~Students learning~~
- This approach emphasizes on learning in natural envt. of human love, peace, co-operation, freedom, equality, rather than of physical values, money, wealth etc
- learning is experienced based.

- Learning is effective when it is need based
- It believes in co-existence
- It concerned with the welfare of all human beings.
- It considers the best learning as based on truth, good and beauty.
- To increase the learners self direction and independence
- It develops an interest in the arts and fosters creativity.



Carl Rogers contribution to humanistic approach to learning :-

- According to Roger's theory, learning in an individual takes place through his interactions with the external environment based on his internal experiences.

Educational implications :-

- This approach believes in child centred education. Therefore it emphasis on reach, touch & teach the child according to his nature, interests, aptitude etc.

- According to this approach, a human being is a wonder creation. He has his own individuality, which should be respected and developed through education.
- In this approach the methods of teaching are developed based in Psychological principles. Active learning is more emphasized.
- we should know our students, their interest, personality, capabilities & background envt. and use teaching method & content accordingly i.e first understands the child then teach him.
- This approach is a democratic approach which recognizes child & advocates by providing rich environment with a view to get all round development in the child
- open schools, freeschools, ungraded class.
- instruction should be intrinsic rather than extrinsic.

Unit-4

Teaching process

[4.1] Concept of teaching, teaching as a profession and teacher as a professional, teaching as an art & science.

① Concept of teaching :-

~~Teaching is a process is an form~~

- Teaching is aims at giving some knowledge to student
- passing of some information to them
- Modify the behaviour of learner
- Giving some experienced of life teaching
- changing the attitude of the learner
- Making the student acquire to the learner
- Teaching is an art of educating other people

Definitions of Teaching :-

Teaching is an intimate contact between a more mature personality & a less mature one which is designed to further the education of later → H.C. Morrison

* Teaching is a relationship which helps the child to develop his powers. Ryburn

* Teaching is a system of action to induce learning — B.D. Smith

* Teaching is a form of interpersonal influence aimed at changing the behaviour potential of another person — N.L. Gage.

* A teacher can never truly teach unless he is still learning himself. A lamp can never light another lamp unless it continues to burn in its own flame.

— Rabindranath Tagore.

Meaning of teaching

Meaning of teaching in autocracy is Teacher is primary & students are secondary.

Meaning of teaching in democracy is both teachers & pupils influence each other

Teaching is an art and science:

* Arts → skill

→ skill of communication
→ " " experimentation
→ " " classroom management
→ " " conducting project
→ " " giving feed back
→ " " Blackboard writing
→ " " Reinforcement
→ " " evaluation.

* science → planned & systematic

→ you know the procedure, method
→ systematic approach of teaching
introduction → explanation → question answering
→ 5E - engage, explore, explain, elaborate & evaluation.
→ procedure of experimentation.

⊛ concept of teaching.

⊛ Teaching as a profession ⊛ teacher as a professional

- purpose ful activity by interaction between teacher & student to achieve the goals of education.
- Give knowledge in a effective way.
- student ability increase
- " potential development
- communication style ↑
- Teacher is a catalyst
- teacher is one who will fasten the development of a learner.
- Make a student self learner.
- " " internally motivated.
- Helps a student to adjust with his envt.
- Help a student to be an achievement in his society.
- continuely solve the academic problems of the learner.
- Teacher is a national builder.
- " " a facilitator
- Teacher is a friend, philosopher and guide - John Dewey.

4.2 Distinction between instruction, training and teaching.

Instruction

- No interaction between teacher & student.
- include Teaching
- Instruction is not teaching
- simply giving direction
- follow the step
- Learner passive
- Do not follow step work can't be finished
- instruction does not include teaching
- *1 By instruction only cognitive aspect can be developed
- *2 instruction is simple
- you instruct someone what do to & how to do.
- instructions must be understood and followed strictly in order to accomplish a particular task.
- *3 instruction is telling how something is done

Training

1. Training is the practical side of learning, provide which provides people skills they need to perform a certain task.
2. A learning process.
3. provides instructions, guidelines and skills & helps to develop their performance
4. involves a practical approach
   - focuses on skills and abilities.
5. often takes place in a work envt.
6. Training is subset of teaching
7. Training is for a specific area
8. Trainer facilitates learning

~~Teaching~~

Teaching

In relation with training

1 → Teaching is the sharing of knowledge or giving instructions on how to do something.

2 → An academic activity.

3 → provide knowledge on a specific subject or topic.

4 → Mainly involves theory.

5 → focuses on education and knowledge.

6 → Takes place in a classroom envt.

7 → Teaching for broad area

8 → Teacher provides information, knowledge, experience.

In relation with Instruction

→ Teaching include instruction

→ By teaching cognitive, psychomotor & affective aspect of pupils developed.

*1 → Teaching is complex

*2

*3 → Teaching is explaining how something is done.

4.3 phases of teaching :- planning, execution and reflection

→

Teaching – Teaching is an important part of the process of education. Its special function is to impart knowledge, develop understanding and skills.

phases of teaching :-

→ phases of teaching derived by phillip Jackson.

Teaching is a complex task. For performing this task, a systematic planning is needed. Teaching is to be considered in terms of various steps & the different steps constituting the process are called the phases of teaching.

→ It is of 3 types

phases of teaching PER

- planning or Pre active phase (Before teaching)
- Execution or Inter-active phase (during teaching)
- Reflection or post-active phase (after teaching)

1. Planning (pre-active phase)

→ All those activities which a teacher perform before class-room teaching or before entering the classroom, Hence this phase is also called pre-active phase of teaching

Activities/steps of pre-active phase :-

1. Fixation of goals - decide - aim, objectives of teaching
2. Decision making - subject matter
3. Arranging/sequencing the elements of content.
4. Decision about the strategies of teaching
5. Distribution of teaching strategies.

→ content analysis

2. Execution (Interactive phase) (Implementation)

→ 2nd phase is about execution of the plan where learning experiences are provided to the student through suitable mode.

→ All those activities which are performed by a teacher after entering in a class

Activities includes in Interactive-phase

1. Sizing up of the class
2. Diagnosis of the learners (By asking question, previous knowledge discussion)
3. Action and reaction of archievement
   → (a) Selection of stimuli
   (b) presentation of the stimuli
   (c) Feedback & Reinforcement
   (d) Deployment of strategies

Teacher

Perception → Diagnosis → Response

③ Reflection (post active phase) → Thinking about thinking

→ This phase concerns with the evaluation activities. This can be done in no. of ways like tests, quizes, question - Answer methods & comments. These activities evaluate the achievements of the students.

Activities of post active phase

~~→ teacher measures the changes in behaviour~~

1. Defining the exact ~~dimensions~~ dimensions of the changes caused by teaching (knowledge, understanding, skill, application, analytical)
2. Selection of appropriate testing devices & techniques. (Homework, assignment, Test, Question answer, project, observation, one to one interview)
3. changing the strategies in terms of evidences gathered. (maximum student donot understand the concept then re-teach & change method, creative method apply)
3. Feedback gives parents & student.

4.4 Role of teacher in teaching learning process: Teacher as a model, facilitator, negotiator, co-learner, reflective practitioner and classroom researcher.

Teacher as a model :-

→ A role model is a person who inspires & encourages us to strive for greatness live our fullest potential & see the best in ourselves.

→ A role model can anybody - parents, siblings, friends, teachers who can influenced on mind & heart & changing life.

Teacher as a role model

→ Teachers follow students through each pivotal stage of development.

→ They spent 6-8 hours a day, 6-days a week with students.

→ After parents, children will 1st learn from teacher from primary school to higher education.

→ The teacher is a dynamic force, they give advice, guidance, motivation, inspiration, creative ideas, manner - behaviour etc

7 without a teacher, school is a body without soul.

7 Students tends to copy the behaviour & mannerism of the teachers.

7 The teachers entire personality is a reflection on the mind of students.

7 So every teacher must have good personality, pleasing & impressive personal appearance, friendly with students.

③ Teacher as a facilitator :-

7 Teacher as a facilitator engage in discussion with children. In one-to-one basis.

7 Helps in design activities to forge collaboration.

7 They encourage students out of box thinking.

7 They helps in collaboration, teamwork, create future leaders.

7 Treat mistakes as part of learning.

7 Teacher as facilitators builds on the knowledge base of the group of students find answers to the question

7 Teacher as a facilitator creat environment where students acquire knowledge by doing activities themselves.

According to Harmer .J (2007)

A term facilitator is used by many authors to describe a particular kind of teacher, one who is democratic rather than autocratic one who fosters learns autonomy through the use of group & pair work and by acting as more of a resource than a transmitter of knowledge.

7 Teacher conduct class, by TLM, groupwork, projectwork, dramatization so teacher is considered as facilitator rather than a mere classroom teacher.

7 If teaching is a professional job "facilitating is the role of teacher".

Ⓒ Teacher as a Negotiator

7 One of the most important skill teachers need for classroom management is negotiation.

7

D) Teacher as a Co-learner :-

- Teachers learning along with students, learning from the students while at the same time learning about the students such as 1st language education backgrounds & also learning various teaching methods from colleagues
- Teachers can learn together with their students.
- Teachers also learning about new teaching methods, online teaching, learning about technology & digital teaching to fulfil students need & cope of with new generation.
- There is increased focus on teacher acting as a co-learner - instead - facilitating students as they learn from many sources rather than being the one source of all knowledge on a subject
- A teacher is a co-learner because he or she should have good communication skills to interact effectively with learners & build a good rapport with them.
- Learner of patience, digital skills, creative skills, assessment, professional skills

E) Teacher as a Reflective practitioner

- According to Chris Argyris and Donald Schon (1974, 1978) there is usually a discrepancy between what teachers say they believe and the ways in which they act. What could resolve this discrepancy is an attempt to help teachers become "Reflective practitioners".

- There by subjecting their professional practice to ongoing critical reflection and making clean their own particular world view.
- Smyth suggests that the critical reflection can be fostered by means of asking no of questions.
- A reflective practioner builds and examines knowledge about learners, the culture & curricula of schooling, and the context in which teaching and learning occurs
- Such a practice assists an educator to simultaneously renew invigorate and maximize the teaching process.
- when instructors engage in reflective teaching, they are dedicating time to evaluate their own teaching practice, examine their curricular choices, consider student feedback and make revisions to improve student belonging and learning.
- It allows teachers to adjust & respond to issues.

F. Teacher as a classroom researcher

- Teachers research to improvement in teaching style or teaching process
- Teachers research about
  - How to teach?
  - How to teach in better way so that every student can understand?
  - Research about data and inform?
  - what type of question should ask?
  - what is the answer to that questions?
  - what type of games & sports should be played in the school?
  - what type of activities, assignment should be give or provide?
  - Research about curriculum & extra curricular activities

→ Reasearch about student knowledge

4.5 Function of a teacher in classroom, school and community.

→ The function of teacher is to help students learn by imparting knowledge to them and by setting up a situation in which students can & will learn effectively.

→ But teachers fill a complex set of roles, which vary from one society to another & ~~one too~~ from one educational level to another. Some of these roles are performed in school, classroom & in the community.

A Functions of a teacher in classroom :-

→ Manage classroom
→ promote learning & supplementing activities, collaboration, supportstaff,
→ using a variety of teaching methods.
→ A classroom teacher is in-charge of each student's overall academic programme.
→ Teach knowledge to students
→ In a class room, teacher teaches in many way like, lectures, project method, dramatizion, small group-activities, hands-on-learning activity

→ Making effective use of classroom management techniques

→ A teacher basic function is to provide instruction, assesses student achievement & progress & manages the learning envi.

→ provides app. instruction and activities for students to meet school, objectives & goals

→ Teacher, facilitates, monitors & supervises students.

→ Hold PTA meetings

→ designing classroom curriculum to facilitates student learning.

→ seating arrangement

→ physical resource arrangement

→ sanitary system ~~mam~~ like water, availability.

→ Blackboard clean

(B) function of a teacher in school

→ communicates clearly and effectively with students, parents, peers & all other stake holders

→ Holds parent conference to discuss the individual student's progress and interpret the school programs.

→ co operating in school-wide supervision of students during out of classroom activities

→ Teachers in schools continue to enrich the student's experiences at home, thus strengthening the valuable personal traits & characteristics initially developed.

→ share TLM & other material of learning to ~~ott~~ other staffs of school.

→ establish a good relationship ~~and~~ with all member of school.

→ Represent a good personality in front of ~~among~~ students.

→ Make lesson plan for student, take attendance finish syllabus in correct time.

→ Do extra curricular activities.

(c) Functions of a teacher in community

The teacher has 2 communities :

(1) **Teaching community** consist of his/her fellow teacher, colleagues & superiors

(2) **Community outside the school** - include the parent ~~of~~ his/her learners, local officials, other members of society in which school is located.

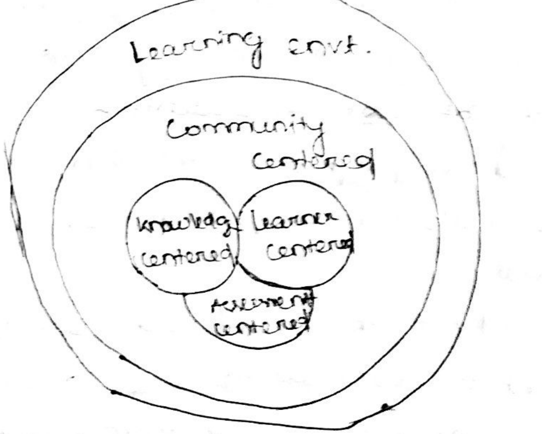
- To function well in the community the teacher is equipped with competencies like attitude, skill, knowledge.
- Teacher play important role in determining the future of student and society.
- Teacher is a nation builder
- Teacher influence student, so student influence community

| Unit - 5 |

ॐ श्री

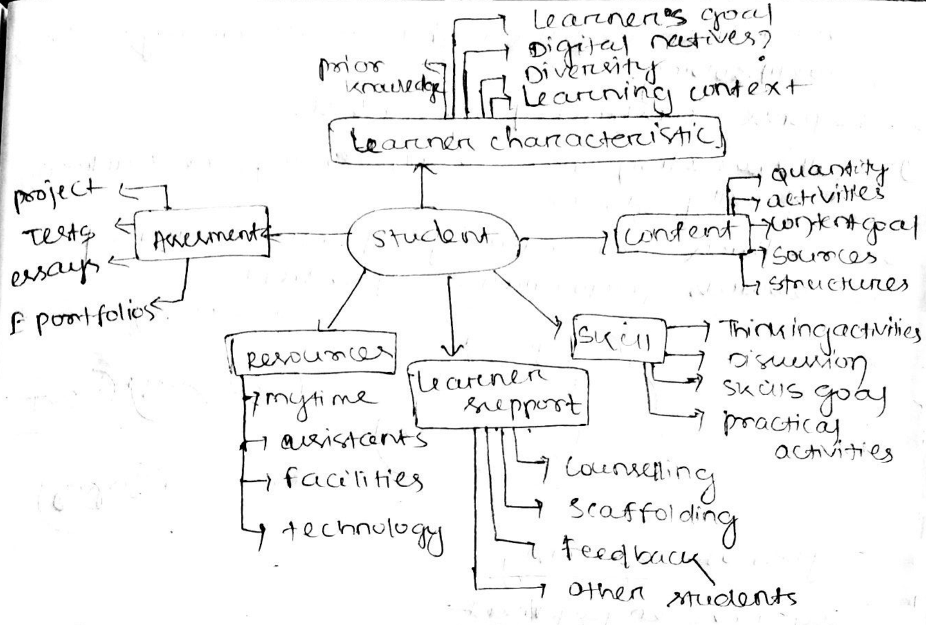
Learning environment & Learning engagement

[5.1] **Meaning of learning environment & learning engagement?**



- Learning envt. refers to the diverse physical locations, contexts and cultures in which student learn.
- A Room with rows of desks & a chalkboard is a good envt.
- Creat an learner-friendly envt. which optimize the ability of student to learn.
- A good learning envt improve student attendance.

- conducting classes in relevant natural ecosystem
- grouping desk in specific ways, decorating the walls with learning materials, utilizing audio, visual & digital technologies, School policies, governance structures and other features may also be consider as elements of a learning envt.
- use of technical device like projector, Information technology, also increase student's interest in learning
- Room with proper ventilation,
- Teach subject and practice different skill.
- How adult interact with student & student interact with one another is also a aspects of a learning envt.
- There is two type learning envt positive & negative, we should try to make the learning envt. always +ve
- The characteristics of learner.
- The goals for teaching & learning
- The activities that will best support learning
- The assessment strategies that will best measure and drive learning.



- Ideas comes from diver gen source
- paint activities on the wall of classroom.
- constant opportunities for practice & growth.
- ethical behaviour, institutional factor affect learning environment (envt.)
- Teacher & student are responsible for creating appropriate learning envt.
- learner centered teaching envt.

(B) Learning engagement :-

learning engagement is the ability to motivationally & behaviourally engage in an effective learning process.

- five strategies for learning engagement

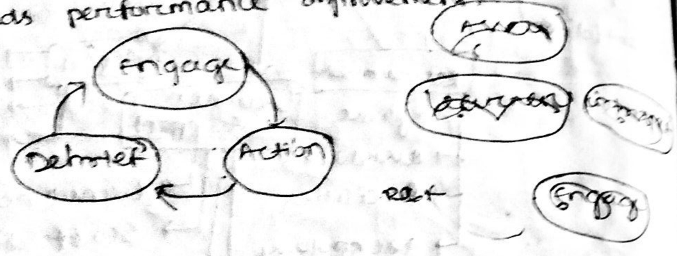
(1) personalize & support that adopts to student & require their decision

2. Activities that require higher order thinking, creative problem solving.

3. Response constructed by students

4. Collaboration that is anytime, any place, culturally & globally diverse

5. Feedback that is timely, specific, oriented towards performance improvement.



Types of Learning

1. Cognitive engagement :-

5.2 (a) Creating positive and productive environment for learning.

(B) Creation of emotionally safe learning environment to increase learning

(A) Creating positive & productive envt. for learning :-

5.3 Development of emotional intelligence

Emotional quotient (EQ) – It is the ability to understand and use and manage the emotions of one's self, of others & of groups.

Importance –
- EI helps you builds stronger relationship.
- Succeed at school & work.
- Achieve your career & personal goal.

5 basic areas of emotional intelligence

1. Knowing ourselves & our emotion.
2. Managing emotion
3. Self motivation
4. empathy
5. Social skills

Characteristics of EI

1. Self awareness
2. Self management
3. Social Awareness
4. Relationship management

① Self Awarness — According to

ⓐ Knowledge your emotions
→ keystone of EI
→ Recognise your emotion
→ Identify your strength & weakness

↓

Self management

ⓐ Manage your emotion, self control, do exercise, meditation
ⓑ Motivate yourself, Ask feed back, Rate yourself, stress management

↓

Social Awarness

~~ⓐ Manage your emotions~~

a. Recognize & understand other people's.
- emotion
- empathy
- service for society

↓

Relationship management

ⓐ manage relationships of others — bond, togetherness
→ conflic manage
→ Teamwork

How to develop emotional intelligence

→ learn how to recognize your own feelings, ask yourself how you feel.
→ Take responsbility for your feelings
→ Ask others how they are feeling
→ Try to anticipate your feelings.
→ Try to be less sensitive
→ consider the problems integrally.

(2) (5.4) cultural congruity between home & school

cultural congruity :- Match of one's culture on personal values with the school

cultural congruity between home & school :

- This involves making the classroom a place where students feel comfortable see themselves represented in the curriculum and classroom environment and engage with materials that provide connection to their home & community experiences.

- When you are teaching a subject, which is connected with student's real life experience connected with on the experience of outerworld.
  give example of student's family, festival, tradition, culture so student's feel connected to the topic

- congruity support learning in multiple ways
  (a) by increasing student's interest
  (b) knowledge about different things
  (c) creating connection between text & life experiences.

- It will help students to think about & analysis the literature.
  (d) encourage them to enquiry about things

- So, teachers should prepare content of the curriculum congruent with student's home experiences its society & surrounding

- Balancing home & family values with the school / university

5.5 ① Assisted performance,
② Supervised discussion &
③ Reciprocal teaching

as strategies to enhance motivation & learning

Motivation is probably the most imp. factors that educators can target in order to improve learning.

(A) Assisted performance :—

→ It defines what a learner can do with help, with the support of envt, of others & of the self.

(b) supervised discussion

supervised :- under your supervision
give direction, guidance or
control activities.

Discussion : → an excellent strategy in
teaching - learning
→ enhancing student motivation
- easy to understand
→ " " remember → foster intellectual agility
→ provides a way for exploration
& discovery.

so while planning a discussion a teacher
should consider not only cognitive but also
focus on social, emotional & physical factors
too.

① physical factors

a. physical setup of your classroom.

b. sitting arrangement

c. circle, u-shaped

② cognitive factors :-

ⓐ Determining & communicating, learning
objectivities.

A purpose
↓
goal of discussion
↓
Idea | information is fit or not
↓
skill, knowledge get from discussion

ⓑ plan a strategy

After determining the objective for your discussion
↓
plan the discussion → How you deal with student
→ How you prepare student for discussion

ⓒ Ask good questions

ⓓ provide direction & maintain focus

ⓔ Bring closure - give actual example
give burning examples

③ Social & emotional factors :-

ⓐ Demonstrate relevance

ⓑ encourage participation

ⓒ make high quality participation count

ⓓ Evaluate the discussion.

(C) Reciprocal teaching :-

Reciprocal

→ reciprocal teaching refers to an instructional activity in which students become the teachers in small group reading session.

→ teacher's help students learn to guide group discussions using four strategies

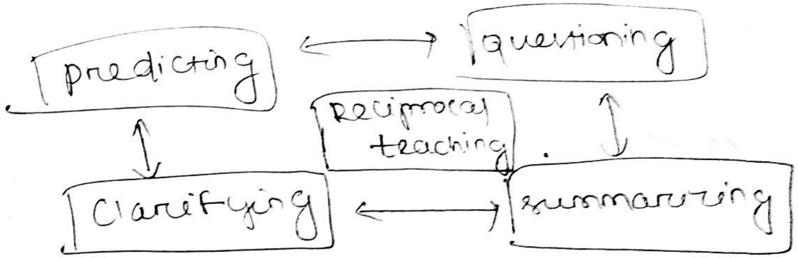
1. predicting
2. Clarifying
3. Question generating
4. summerizing

1. predicting :- make prediction, draw inference before & during the reading

2. Clarifying :- clarifying words phrases

3. Question generating :- what did we learn?, what you think about?, what is the best answer to the question?

4. summerizing :- best Title, subheading, This chapter is about

Benifits of Reciprocal teaching

1. Activate prior knowledge
2. Builds social interaction & collaboration.
3. Develops students leadership
4. Develops independent responsibility
5. promote flexible thinking & meta cognition
6. encourage students to think about their own thought process during reading.